IN THE CLAIMS

Please amend the claims as follows:

1. (Original) An article comprising:

a plurality of first heat transfer structures disposed in a matrix of a second heat transfer structure;

a solder preform disposed on the matrix; and

a transition between the matrix and the solder preform, wherein the transition is selected from an interface and a concentration gradient.

2. (Original) The article according to claim 1, wherein the matrix is a polymer, and wherein the plurality of first heat transfer structures is selected from graphite, diamond powder, inorganic dielectric particles, and metal particles.

3. (Original) The article according to claim 1, further including:

a middle heat transfer structure disposed between the matrix and the solder preform, wherein the middle heat transfer structure includes a composition that is transitional between the composition of the matrix and the composition of the solder preform.

4. (Original) The article according to claim 1, further including:

a middle heat transfer structure disposed between the matrix and the solder preform, wherein the middle heat transfer structure includes a composition that is transitional between the composition of the matrix and the composition of the solder preform, wherein the transition between the matrix and the solder preform includes a first interface between the solder preform and the middle heat transfer structure and a second interface between the middle heat transfer structure and the matrix.

5. (Original) The article according to claim 1, further including:

at least one particulate material in the matrix in addition to the plurality of first heat transfer structures.

6. (Original) The article according to claim 1, wherein the plurality of first heat transfer structures includes a concentration region in a portion of the matrix.

7. (Original) A package comprising:

a heat spreader;

a die disposed below the heat spreader; and

a heat transfer composite disposed above and on the die and below and on the heat spreader, wherein the heat transfer composite includes:

a plurality of first heat transfer structures disposed in a matrix of a second heat transfer structure, wherein the matrix is a polymer, and wherein the matrix is disposed on the die; and

a solder preform disposed on the matrix, wherein the solder preform is disposed on the heat spreader.

8. (Currently Amended) The package according to claim 7 [[8]], wherein the heat spreader includes a cladding layer selected from nickel, nickel-copper, and gold.

9. (Currently Amended) The package according to claim 7 [[8]], wherein the die includes a cladding layer selected from nickel, nickel-copper, and gold.

10. (Currently Amended) The package according to claim 7 [[8]], wherein the die includes an active surface and a backside surface, the package further including:

a mounting substrate, and wherein the die is electrically coupled at the active surface to the mounting substrate.

11-24. (Canceled)

25. (Previously Presented) The article of claim 1, wherein the transition is an interface, and wherein the transition includes a solder-rich zone overlapping a polymer-rich zone.

26. (Previously Presented) The article of claim 1, wherein the transition is a concentration gradient between a solder-rich zone and a polymer-rich zone.

27. (Previously Presented) The article of claim 3, wherein the transition is an interface, and wherein the transition includes a solder-rich zone overlapping a polymer-rich zone.

28. (Previously Presented) The article of claim 3, wherein the transition is a concentration gradient between a solder-rich zone and a polymer-rich zone.

29. (Previously Presented) The article of claim 1, further including a lower tie layer, selected from an organic adhesive and a metal.

30. (Previously Presented) The article of claim 1, further including an upper tie layer, selected from an organic adhesive and a metal.

31. (Previously Presented) The article of claim 1, further including at least one of:

a lower tie layer disposed above and on the matrix, selected from an organic adhesive and a metal; and

an upper tie layer disposed below and on the solder preform, selected from an organic adhesive and a metal.

32. (Previously Presented) The package of claim 7, further including:

a transition between the matrix and the solder preform, wherein the transition is selected from an interface and a concentration gradient.

33. (Previously Presented) The article of claim 32, wherein the transition is selected from an interface and a concentration gradient, and wherein the transition includes a solder-rich

zone overlapping a polymer-rich zone.

34. (Previously Presented) The package of claim 7, further including:

a middle heat transfer structure disposed between the matrix and the solder preform, wherein the middle heat transfer structure includes a composition that is transitional between the composition of the matrix and the composition of the solder perform; and

a transition between the matrix and the solder preform, wherein the transition is selected from an interface and a concentration gradient, and wherein the transition is a gradient between a solder-rich zone and a polymer-rich zone.

35. (Previously Presented) The package of claim 34 further including at least one of:

a lower tie layer disposed above an on the matrix, wherein the lower tie layer is selected from an organic adhesive and a metal; and

an upper tie layer disposed above and on the middle heat transfer structure wherein the upper tie layer is selected from an organic adhesive and a metal.

36. (Previously Presented) An article comprising:

a plurality of first heat transfer structures disposed in a matrix of a second heat transfer structure;

a solder preform disposed on the matrix; and

a transition between the matrix and the solder preform, wherein the transition is selected from an interface and a concentration gradient, wherein the transition is selected from an interface and a gradient, and wherein the transition includes a solder-rich zone overlapping a polymer-rich zone.

37. (Previously Presented) The article of claim 36, further including:

a middle heat transfer structure disposed between the matrix and the solder preform, wherein the middle heat transfer structure includes a composition that is transitional between the composition of the matrix and the composition of the solder perform; and

a transition between the matrix and the solder preform, wherein the transition is selected from an interface and a concentration gradient, and wherein the transition is a gradient between a solder-rich zone and a polymer-rich zone.

38. (Previously Presented) The article of claim 36, further including at least one of:

a lower tie layer disposed above and on the matrix, selected from an organic adhesive and a metal; and

an upper tie layer disposed below and on the solder preform, selected from an organic adhesive and a metal.